



UNITED STATES DEPARTMENT OF COMMERCE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/003,812	01/07/98	BAN	S 041-1987

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EXAMINER

GRIER, L

ART UNIT

PAPER NUMBER

2747

DATE MAILED: 08/02/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/003,812	BAN ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Laura A. Grier	2747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - a) All b) Some \* c) None of the CERTIFIED copies of the priority documents have been:
    1. received.
    2. received in Application No. (Series Code / Serial Number) \_\_\_\_\_.
    3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

#### Attachment(s)

- |  |  |
|--|--|
| 15) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                     | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 16) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____    | 20) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Multipurpose Earphone Set.

2. The disclosure is objected to because of the following informalities: page 8, line 14, the words "line 13" should read "line 14."

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1 and 4** are rejected under 35 U.S.C. 102(b) as being unpatentable over Relyea (U.S. Patent No. 4621372).

Regarding claim 1,

Relyea discloses a dual communication headset. Relya disclosure includes: a headset (figure 2 and column 3, line 55) with earphones (figure 2-references 10 and 12), and first and second transceivers (figure 2-reference 18 and 30), which reads on the claimed "earphone apparatus "; plug-in connectors (figure 2-references 42 and 44 and column 3, lines 30-31) which reads on the claimed "first plug for disconnectable connection" and "second plug for disconnectable connection; also earphones (figure 2-references 10 and 12) in connection with the plug-in connectors which reads on the

claimed "electroacoustical transducer"; and the transceivers (figure 2-reference 18 and 30), which reads on the claimed "means for controlling the level of the signal."

Regarding **claim 4**, Relyea discloses everything claimed as applied above (see claim 1). Relyea further discloses:

a microphone coupled to a switch (figure 2-references 24 and 40 and column 3, lines 14-19) and (figure 1-references 24, 36 and 38, respectively and column 2, lines 64-68 and column 3, lines 1-3), which reads on the claimed "microphone element" and "switch" being connected to the claimed "second plug."

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 2, 3, and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Relyea in view of Slater (U. S. Patent No. 4941187).

Regarding **claim 2**,

Relyea discloses a dual communication headset. Relyea disclosure includes:

a headset (figure 2 and column 3, line 55) with earphones (figure 2-references 10 and 12), and first and second transceivers (figure 2-reference 18 and 30), which reads on the claimed "earphone apparatus"; plug-in connectors (figure 2-references 42 and 44

and column 3, lines 30-31) which reads on the claimed "first plug for disconnectable connection" and "second plug for disconnectable connection"; also earphones (figure 2-references 10 and 12) in connection with the plug-in connectors which reads on the claimed "electroacoustical transducer." However, Relyea fails to specifically disclose a means for detecting whether or not a call-related electric signal is outputted from the portable communication terminal device and means for disconnecting the first plug and connecting the second plug when call-related signal is outputted. The examiner maintains that providing a detecting means for the call-related signal and means for disconnecting the first plug and connecting the second plug is well known in the art, as taught by Slater.

Regarding the detecting means and the means of disconnecting and connecting the claimed plugs, in a similar field of endeavor, Slater discloses an intercom apparatus for integrating disparate audio sources for use in light aircraft or similar high noise environments. Slater disclosure includes:

a voice activation (VOX) sensitivity control (figure 1-reference 18) that acts in connection with audio detector means (column 10, line 27), and a radio audio (activity) detector (figure 2-reference 102 and column 8, lines 47) which reads on claimed "means for detecting";

and a priority switch (figure 1-referenc 22 and column 5, lines 35-39), which reads on the means for disconnecting the first plug and connecting the connecting plug during a call-related output signal.

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Therefore, it would have been obvious to one of the ordinary skill in art at the time that the invention was made to modify Relyea's headset by providing for the detecting means of signals and selective means for disconnecting and connecting said plugs for the purpose of being able to effectively navigate between the output sounds of the respective signals.

Regarding **claim 5**, Relyea and Slater discloses everything claimed as applied above (see claim 2). Relyea disclosure further includes:

a microphone coupled to a switch (figure 2-references 24 and 40 and column 3, lines 14-19) and (figure 1-references 24, 36 and 38, respectively and column 2, lines 64-68 and column 3, lines 1-3), which reads on the claimed "microphone element" and "switch" being connected to the claimed "second plug."

Regarding **claim 3**, Relyea and Slater discloses everything as applied above (see claim 2). Slater further discloses:

a voice activation (VOX) sensitivity control (figure 1-reference 18) that acts in connection with audio detector means (column 10, line 27), and a radio audio (activity) detector (figure 2-reference 102 and column 8, lines 47) which reads on claimed "means for detecting"; and a priority switch (figure 1-referenc 22 and column 5, lines 35-39), and means for regulating the signal level at predetermined stages (columns 10-11).

**Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Relyea in view of Slater.

Regarding claim 6,

Relyea discloses a dual communication headset. Relyea's disclosure includes:

a headset (figure 2 and column 3, line 55) with earphones (figure 2-references 10 and 12), and first and second transceivers (figure 2-reference 18 and 30), which reads on the claimed "earphone apparatus"; plug-in connectors (figure 2-references 42 and 44 and column 3, lines 30-31) which reads on the claimed "first plug for disconnectable connection" and "second plug for disconnectable connection"; also earphones (figure 2-references 10 and 12) in connection with the plug-in connectors which reads on the claimed "electroacoustical transducer". However, Relyea fails to specifically provide a device allowing the means for increasing the level of a signal while decreasing the other level of the two signals. The examiner maintains that providing means for increasing the level of a signal while decreasing the other level is well known in the art as taught by Slater.

Regarding the means for increasing the level of a signal while decreasing the other level, in a similar field of endeavor, Slater discloses an intercom apparatus for integrating disparate audio sources for use in light aircraft or similar high noise environments. Slater disclosure includes:

partial-mute switches and partial mute gates that enables partial muting (column 8, lines 67-68 and column 9, lines 1-58), which reads on the claimed means of increasing a signal level, while decreasing another.

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Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention made to modify Relyea's headset by providing partial muting as taught by Slater for the purpose of alternating (increasing or decreasing) the signal level of the two devices for selected situations for better sound quality.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A. Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on 8 am. – 4:30 p.m., Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-6306 for regular communications and (703) 308-6306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

LAG *LAG*  
July 31, 2000

  
FORESTER W. ISEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2700